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CENTRAL FAX CENTERAppl. No. 10/707,822
Reply to Office action of June 27, 2007

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

- 5 1. (currently amended) A method for reducing phase mismatch in quadrature signals in an RF receiver, wherein the quadrature signals comprises a first signal and a second signal that are at about quadrature phase angles, the method comprises: determining subtracting a portion of the first signal from the first signal; and modifying the second signal by the portion of the first signal so that a phase difference between the modified second signal and the first signal becomes substantially close to 90 degrees.
- 10 2. (previously presented) The method of claim 1 further comprising: compensating the portion of the first signal to the second signal to reduce phase mismatch in the pair of quadrature signals.
- 15 3. (cancelled)
4. (currently amended) A method used in an RF receiver for reducing an image cross talk, the RF receiver comprising:
 - 20 a first mixer and a second mixer for receiving RF signals and respectively generating a first signal and a second signal that are at about quadrature phase angles; and
 - 25 a programmable phase calibration device coupled to the pair of mixers for reducing phase mismatch in the pair of quadrature signals when the phase mismatch causes the image cross talk;the method comprising:
 - 30 utilizing the pair of mixers to process the RF signal and to output the pair of quadrature signals; and
 - utilizing the programmable phase calibration device to reduce the phase

Appl. No. 10/707,822
Reply to Office action of June 27, 2007

5 mismatch in the pair of quadrature signals through subtracting a portion of the first signal from the first signal and modifying the second signal by [[a]] the portion of the first signal, wherein two ports of the programmable phase calibration device are respectively connected to two output ports of the pair of mixers.

10 5. (previously presented) The method of claim 4 further comprising: utilizing the programmable phase calibration device to compensate the portion of the first signal to the second signal so that phase difference between the compensated second signal and the first signal becomes 90 degrees.

15 6. (cancelled)

7. (currently amended) An RF receiver comprising:
15 a first mixer and a second mixer for receiving RF signals and respectively generating a first signal and a second signal that are at about quadrature phase angles; and
20 a phase calibration module coupled to at least one of the first mixer and the second mixer, for subtracting a portion of the first signal from the first signal and combining [[a]] the portion of the first signal with the second signal so as to make the phase difference of the first signal and the second signal substantially equal to 90 degrees.

25 8. (cancelled)

9. (previously presented) The RF receiver of claim 7 wherein the phase calibration module further comprises a phase calibration device coupled between the first mixer and the second mixer.

30 10. (previously presented) The RF receiver of claim 7 further comprising an analog

Appl. No. 10/707,822
Reply to Office action of June 27, 2007

front end controller (AFE controller) coupled to and controlling the phase calibration module so as to make the phase difference of the first signal and the second signal substantially equal to 90 degrees.

5 11. (cancelled)

12. (previously presented) The RF receiver of claim 7 wherein the phase calibration module comprises a cross programmable gain amplifier (XPGA).

10 13. (previously presented) The RF receiver of claim 7 being applied in a GSM communications system or a WLAN communications system.

14. (currently amended) The RF receiver of claim 7 further comprising:
a complex filter, having input ports electrically connected to the phase
15 calibration module, for processing image cross talk caused by mismatch
between the first signal and the second signal.

15. (currently amended) An RF receiver comprising:
a first mixer and a second mixer for receiving RF signals and respectively
20 generating a first signal and a second signal that are at about quadrature
phase angles;
an amplitude calibration module coupled to at least one of the first mixer and
the second mixer, for adjusting the amplitude of at least one of the first
signal and the second signal so as to make the amplitude of the first signal
25 and the second signal substantially equal; and
a complex filter, having input ports electrically connected to the amplitude calibration
module, for processing image cross talk caused by mismatch between the first signal
and the second signal.

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